Managing Juvenile Rheumatoid Arthritis: Treatment and Support for Children

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Perspective

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DESCRIPTION

Juvenile Rheumatoid Arthritis (JRA), also known as Juvenile Idiopathic Arthritis (JIA), is a type of arthritis that affects children under the age of 16. It is a chronic disorder that can cause inflammation in eyes, fever, rashes in addition to causing joint pains, swelling and stiffness. JRA affects approximately 1 in every 1,000 children in the United States and can have a significant impact on a child's quality of life. In this article, we will discuss the causes, symptoms, diagnosis and treatment of JRA.

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Causes

The exact cause of JRA is unknown, but it is believed to be an autoimmune disorder. In autoimmune disorders, the body's immune system attacks healthy tissues, causing inflammation and damage. In JRA, the immune system attacks the synovium, which is the tissue that lines the joints. This causes inflammation, which can lead to joint damage and deformity over time.

There are several factors that may increase a child's risk of developing JRA. These include:

Genetics: JRA tends to run in families, so children with a family history of the condition may be more likely to develop it.

Environmental factors: Certain environmental factors, such as infections or exposure to toxins, may activate the onset of JRA in children who are genetically predisposed to the condition.

Symptoms

The symptoms of JRA can vary depending on the type of JRA a child has. There are three main types of JRA.

Oligo articular JRA: This is the most common type of JRA and it affects four or fewer joints in the body. Oligoarticular JRA typically affects the knees, ankles, wrists and may cause eye inflammation in some children.

Polyarticular JRA: This type of JRA affects five or more joints in the body and can cause joint pain, swelling and stiffness. Polyarticular JRA can also cause eye inflammation and may affect the small joints in the hands and feet.

Systemic JRA: This is the least common type of JRA and it can affect the entire body. Systemic JRA can cause fever, rash and inflammation in multiple joints.

In addition to joint pain, swelling and stiffness other symptoms of JRA may include fatigue, loss of appetite, limping, reduced range of motion in the joints, eye inflammation (uveitis), which can cause redness, pain, sensitivity to light and high fever.

Diagnosis

Diagnosing JRA can be challenging, as many of the symptoms are also common in other conditions. To diagnose JRA, a doctor will typically begin by performing a physical exam and taking a detailed medical history. They may also order imaging tests, such as X-rays or Magnetic Resonance Imaging (MRI), to look for signs of joint damage or inflammation.

Blood tests may also be performed to check for markers of inflammation, such as C-reactive protein and Erythrocyte Sedimentation Rate (ESR). These tests can help to confirm a diagnosis of JRA and rule out other conditions that may cause similar symptoms.

Treatment for JRA typically involves a combination of medications, physical therapy and lifestyle changes.

Medications

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) are often used to relieve pain and reduce inflammation in children with JRA. These medications include ibuprofen (Advil, Motrin) and naproxen (Aleve). In some cases, Disease Modifying Anti-Rheumatic Drugs (DMARDs) may also be prescribed to slow the progression of joint damage. DMARDs include methotrexate and sulfasalazine.

Biologic therapies, which are medications that target specific components of the immune system, may also be used to treat JRA. Biologics include etanercept (Enbrel), adalimumab (Humira) and tocilizumab (Actemra).

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Physical therapy

Physical therapy can be helpful in improving joint mobility and reducing pain in children with JRA. A physical therapist can work with a child to develop a personalized exercise program that is tailored to their specific needs and abilities. Exercises may include stretching, strengthening and range of motion exercises.